Royal Commission on the Future
of the Toronto Waterfront

Access and Movement

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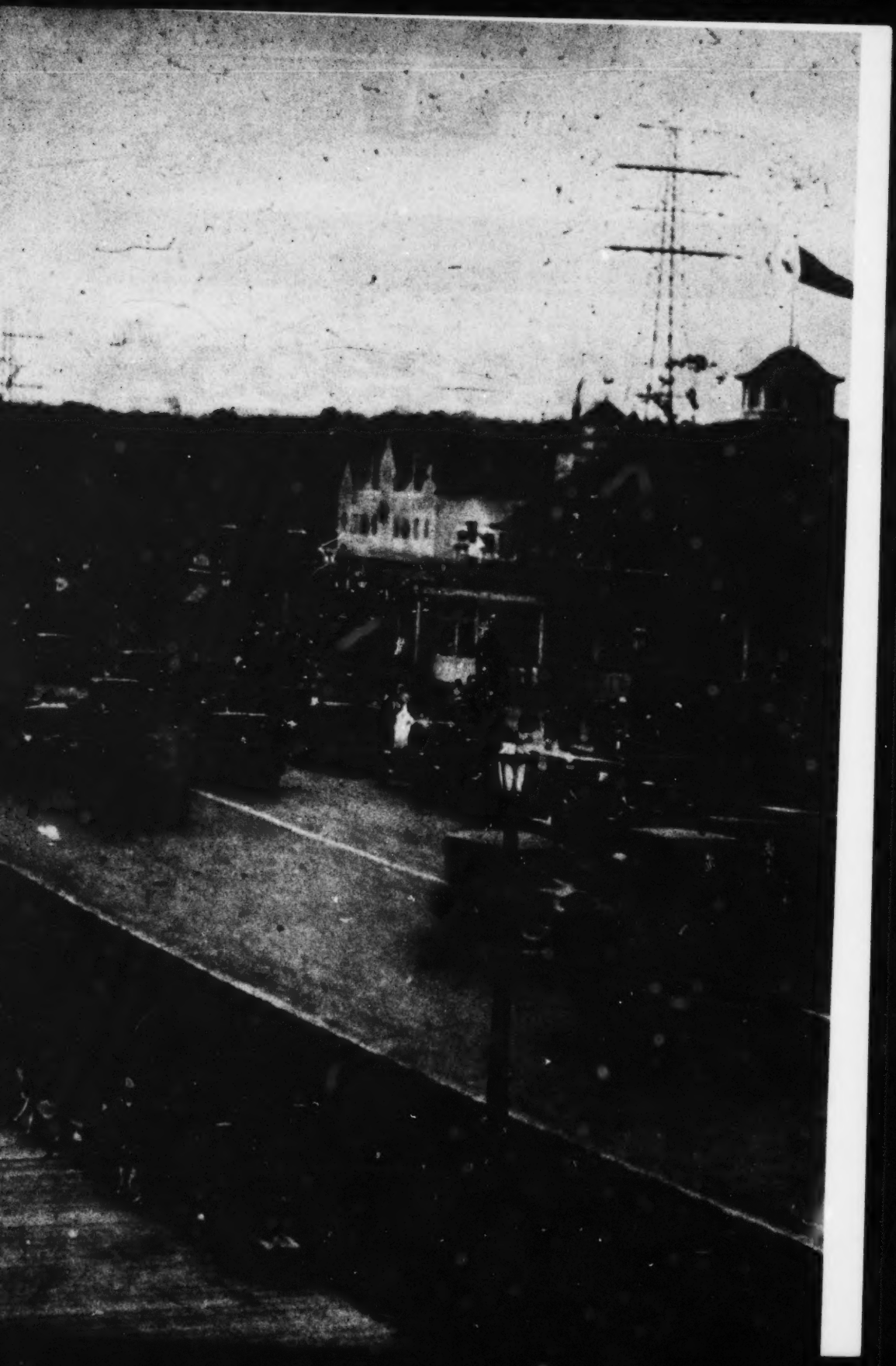

Royal Commission on the
Future of the
Toronto Waterfront

CANADA

Commission royale sur
l'avenir du
secteur riverain de Toronto

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Dear Colleague:

I am pleased to provide a copy of the Report made to me by the Access and Movement Work Group of the Royal Commission on the Future of the Toronto Waterfront.

It represents the opinion of the authors and not of the Commission. Clearly, however, it deals with a subject of utmost importance facing this Commission and all those who want a better waterfront for Toronto.

I look forward to hearing from you.

Cher collègue,

Je suis heureux de vous transmettre un exemplaire du rapport que m'a remis le groupe de travail sur l'accès et les déplacements de la Commission royale sur l'avenir du secteur riverain de Toronto.

Ce rapport représente l'opinion de ses auteurs et n'engage pas la Commission. De toute évidence, toutefois, il concerne un sujet d'une très haute importance pour la Commission et pour tous ceux qui souhaitent que le secteur riverain de Toronto soit plus accueillant.

En espérant recevoir bientôt de vos nouvelles, je vous prie d'agréer, cher collègue, mes cordiales salutations.

David Crombie

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Access and Movement

Report of the
Access and Movement Work Group
to the
Royal Commission
on the Future of the Toronto Waterfront

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Frontispiece:
Lakeshore Boulevard in its 1920 heyday.

Photo courtesy: Archives of the Toronto Harbour Commissioners

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The Access and Movement Work Group

Access and movement on the waterfront: passengers on the Toronto Island Ferry make a winter crossing.

Photo: Sally Gibson, Binscarth Publications Inc.

The Access and Movement Work Group

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Nino Campitelli
Gerald Robinson
John Bousfield

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Ken Greenberg established and directed the Division of Architecture and Urban Design of the City's Planning and Development Department. A well known lecturer and writer on urban design, he is a principal with Berridge Lewinberg Greenberg, and teaches at York University.

Edward J. Levy is President of B-A Consultants, transportation planners and engineers serving private companies and institutions in North America and Europe. He served as coordinator of the Central Area Traffic Management Study for the City of Toronto and the Municipality of Metropolitan Toronto.

Nino Campitelli is an engineer who, for more than 30 years, has worked on transportation planning for the Province of Ontario; he served as Assistant Director to the Metropolitan Transportation Plan Review of 1974. Currently, he is Manager of the Province's Municipal Transportation Policy Office.

Gerald Robinson is an architect practising in Toronto. He was a member of the City of Toronto Planning Board in 1968. He has prepared plans for the waterfronts of Kenora, Sarnia, and Port Edward.

John Bousfield has practised as a planning consultant in the Metropolitan Toronto area and throughout Ontario for more than 30 years. He was the Study Co-ordinator for the 1967 Metro Waterfront Plan.

The Access and Movement Work Group was appointed by the Honourable David Crombie, Commissioner of the Royal Commission on the Future of the Toronto Waterfront, to gather information about movement to, and along, the Metropolitan Toronto waterfront, to consider issues and possible solutions

to problems related to access and movement, and to make recommendations on those matters.

The specific task of this Work Group was to consider how to get people and goods to, along, and from Metropolitan Toronto's waterfront, whether they are moving by private car or truck, public transit, bicycle, boat, plane or on foot. The Group has looked at experiences of the past, pertinent issues of the day, and possible courses of action for the future.

Four other Groups have also been at work on waterfront related problems, constraints, and opportunities, each from a different perspective: Housing and Neighbourhoods ; Parks, Pleasures, and Public Amenities; Environment and Health; Jobs, Opportunities, and Economic Growth.

Summary

Two modes of transportation on the Ward's Island boardwalk.

Photo: Sally Gibson, Binscarth Productions Inc.

Summary

This summary highlights the major transportation and planning issues on the waterfront, as assessed by the Access and Movement Work Group of the Royal Commission on the Future of the Toronto Waterfront.

The Group identified four vital issues that have to be addressed if waterfront planning is to be effective. They are:

1. the need for integration of planning;
2. the need to shape development;
3. the need to reconcile public and private interests; and
4. the need for access to the waterfront.

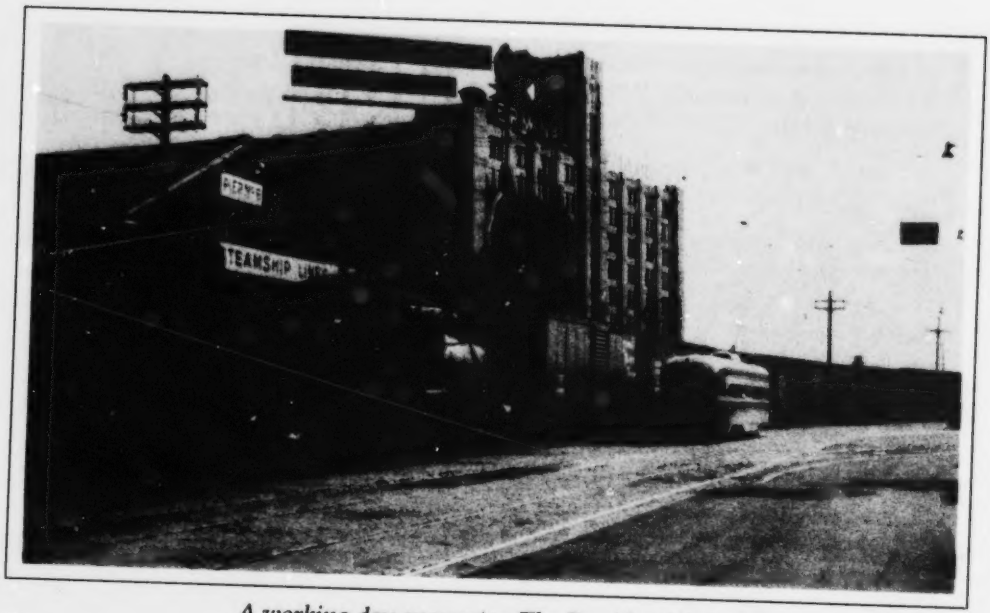
These needs arise primarily from a lack of a common vision for the waterfront among the agencies participating in planning, and a lack of co-operation in implementation.

In order to shape a vision for the waterfront, we propose a Transportation Framework, a network of various forms of transportation to and along the waterfront, with particular attention paid to the way the modes interact and support one another. This framework could give direction and coherence to actions related to the waterfront. Implementing it requires an integrated approach, continued support, and deep commitment by all levels of governments, the private sector, and the public.

Included in the framework are Waterfront Transportation Centres, where many forms of transport come together, and where there are exciting possibilities for development, and for access to the water.

To start the process we have made a series of recommendations. Some set conditions for achieving a broad consensus on the transportation framework, waterfront transportation centres, and integration of planning and transportation investment. Other recommendations examine local issues in greater detail so that decisions can be made now to protect access and movement.

The Access and Movement Group urges that the proposed transportation framework be communicated to all affected groups; and discussions should begin so that it can be refined and adopted to form the basis for concerted actions by all thosewho have responsibility for and interest in the Toronto Waterfront.



A working day encounter. The Presidential Conference streetcar was only four years old in 1955 but CPR 6280, was all of 42 years old as the two met on Queen's Quay. The all-electric PCC was running Dupont service to the old ferry docks. The old Terminal Warehouse in the background has been renovated to offices, stores, and residences.

Larry Partridge: *Mind The Doors, Pleas: The Story of Toronto and Its Streetcars*

Photo: R.J. Sandusky

A Brief History

A Royal Commission on the Future of the Toronto Waterfront is long overdue in a community that, from its earliest days, has owed its very existence to the waterfront and, in fact, began there. At the end of the 18th century, Toronto was a village comprising no more than 12 blocks centred at what is now Berkeley Street, six blocks to the south of the present King Street and six to the north. (Church Street was far from the business district and today's King-Yonge intersection was not even a crossroads.) John Graves Simcoe, Upper Canada's first Lieutenant-Governor, wanted to turn his back on the little Town of York and, with the Colonial Office trying to decide on a capital city, promoted a site on the River La Tranche — which he promptly renamed the Thames River — near the present London, Ontario. But geography favoured York, which was chosen in part because it already had a thriving commercial "highway" at its door-step — Lake Ontario.

Confidence in the harbour was amply rewarded: the Town of York, which in 1803 had a population of 456, was, by 1876, the thriving City of Toronto. More than 2,200 vessels visited it that year, while 62 ships wintered in the harbour. Just three years later, on September 1, 1879, crowds turned out for the First Annual Exhibition of the Industrial Exhibition Association of Toronto, forerunner of the Canadian National Exhibition.

The Esplanade, developed in the mid-19th century as a broad waterfront promenade, offered direct access to the docks. In the 1850s and '60s, the expanding railways took over The Esplanade, filling the area with the finest examples of new technology. For a full century, The Esplanade was lost as a public promenade; it was only in the late 1970s and '80s that sections were reclaimed and portions of The Esplanade again became a busy place filled with people. (Though its name has been revived and it is being extended through the Railway Lands again, not all its past roles can be resurrected: eight decades of landfill programs have moved the water-front so far south that The Esplanade is now far from the shoreline.)

From the middle of the 19th century, the City of Toronto had been served by privately owned transit systems; in 1861, the Toronto Street Railway ran horse-drawn carriages that took people from the St. Lawrence Market to the City's thriving downtown at Front and Jarvis. In 1891, the Toronto Railway

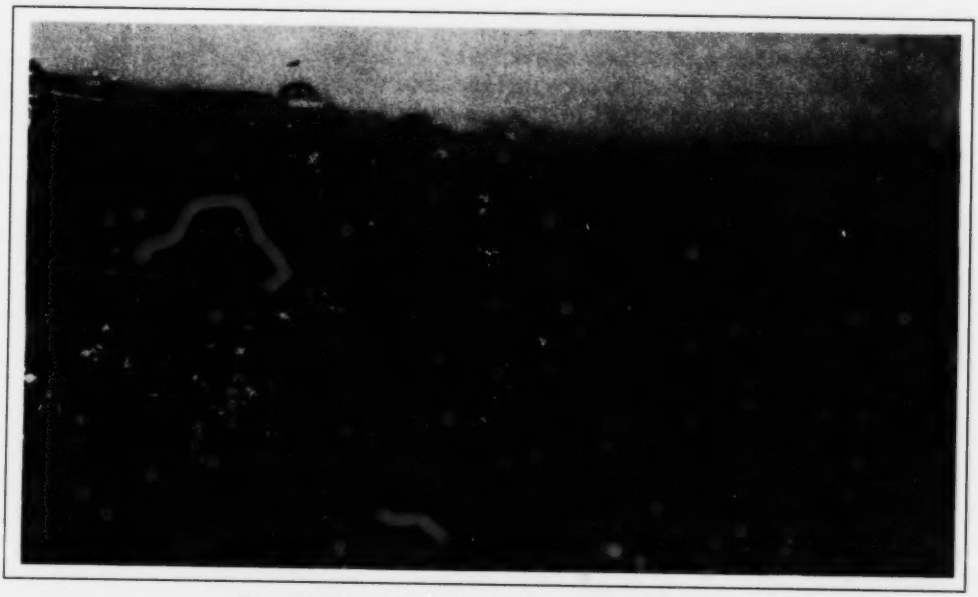
Company, a private concern, took over and for 30 years it operated electric streetcars (known as "radial electric cars" because they radiated from the centre of the city — in other words, inter-urban transit). In 1921, Toronto became the first Canadian city to have a municipally owned transit system, operated by the Toronto Transportation Commission (which, in 1954, became the Toronto Transit Commission). Electric cars, privately owned and operating from the villages of Etobicoke and West Hill, trundled along the Lakeshore and Kingston Road respectively, bringing people to the big city.

In the summer, the traffic was reversed: Torontonians headed to the Beach in the east and to the resort hotels south of Etobicoke to escape the city heat. Or they went to the docks at the waterfront, to board passenger boats plying the Great Lakes, remnants of the fleets that, for much of the 1800s, had been the favoured way of going from city to city and to the American side of the lake.

With the end of the Second World War, all forms of travel boomed; in 1954, Toronto opened Canada's first subway and, a year later, began work on a 12.87 km expressway that would run along the waterfront from the Humber River on the west to Leslie Street on the east, most of it elevated above grade and creating a powerful new presence. The first section of the roadway was completed in the late summer of 1958 and the last portion, from the Don Valley Parkway to Leslie Street, opened on 15 July 1966; the total cost was $103 million, eight million dollars more than had originally been estimated.

What had changed over the years, and what continues to change, is not the importance of the waterfront, but its role in the social, commercial, and economic life of the community.

Four Key Issues on the Waterfront



Crowds along the waterfront in 1928, just after Boulevard Drive was built. On the right is the judges' stand. On the left is the cupola of the Women's Building.

James Lorimer, *The Ex: A Picture History of the CNE*

Photo: National Archives, Ottawa

Four Key Issues on the Waterfront

In our study of the waterfront, four basic issues have appeared again and again. They are:

1. the need for integration of planning;
2. the need to shape development;
3. the need to reconcile public and private interests;
4. the need for access to the waterfront.

1. The Need for Integration of Planning

There are projects now being planned or already under way that will dramatically transform the shoreline of Lake Ontario and the Toronto waterfront. The Work Group's overriding concern is that many of these initiatives have been pursued by single purpose agencies with mandates that have to do with a single part of the waterfront or that focus on a specific need or goal, conceived in isolation and reflecting only a narrow interpretation of opportunities available on the waterfront. While not individually disastrous, the accretion of such projects leaves bewildering fluctuations in the quality and consistency of design of many buildings and activities. It is an understatement to say that there is an ideal opportunity now — and a great need — to integrate initiatives creatively and coherently.

A common vision would not diminish diversity but would strengthen it by establishing consensus on what elements make for a lively, diverse waterfront. The lack of that common vision is one of the underlying causes of the current situation. The Work Group supports the need for more integration amongst those agencies and interests involved, and a more unified approach to securing the critical ingredients that the Toronto waterfront can and should have.

A further result of the piecemeal pattern of redevelopment is a lack of co-operation and co-ordination amongst the 30 boards and agencies with jurisdiction across the waterfront. In the past, many of these groups made decisions concerning infrastructure and land development without considering the overall need for access to the waterfront. The presence of so many agencies and boards is not, in itself, a problem — if they can be persuaded to work together. Among the possible ways to overcome the current inertia are:

- regularly scheduled meetings amongst competing groups in order to identify and serve the public interest;
- less emphasis on the exclusive goals of individual agencies;
- a new administrative or operational body with the power to break log-jams and find innovative solutions to recurring problems;
- an agreed-on framework within which funding agencies would act;
- commitment to patient and persistent consultation in order to change outmoded approaches.

If Toronto is chosen as the site of either the 1996 Olympics or a World Exposition in the year 2001, it could co-ordinate the facilities they generate with existing land use and transportation networks — but only by planning well in advance. In order to ensure the success of such colossal events, all planning agencies, development groups, and other participants must be prepared to meet the challenge collectively. That would happen only if there were a clear sense of direction and goals, developed well in advance of the events themselves.

The total amount invested in the waterfront in the next few decades will be staggering; the current pattern of isolated activity, with little concern for the overall picture, could result in missed opportunities on the waterfront — especially if a variety of significant projects proceed simultaneously. If access and movement along the waterfront are to be effective, co-operation and co-ordination are essential.

2. The Need to Shape Development

In the 1960s, municipalities begged developers to consider waterfront locations. In an effort to revitalize derelict and under-utilized areas, generous financial incentives and broad public support were offered to make such projects attractive. Now, the rediscovery of the waterfront has unleashed powerful market forces and led to fierce competition for available waterfront sites and pressure to develop areas previously not considered.

Properly applied, such market activity helps achieve otherwise unattainable important public objectives. Directed appropriately, it can lead to a lively mix of uses that, in turn, means

heavy utilization of public transit during both peak and off-peak periods and that generates tax revenues to pay for amenities and infrastructure improvements.

In many cases, however, current regulations affecting waterfront development do not adequately protect the public interest: poorly planned and executed development becomes a threat rather than an opportunity, blocking vital improvements to access, diversification of activities, and needed public amenities. In concert with the lack of integrated planning mentioned previously, insularity of individual projects promotes exclusion and privacy at the expense of public access. It should be noted, however, that attempts are now being made through the development approval process to rectify this situation.

Much of the existing waterfront transportation network was designed to serve uses that have decreased in importance — for example, rail access to shipping — and was fragmented. For historical reasons, many city streets, transit routes, and sidewalks did not extend to the water, while urban transportation systems ignored the waterfront and were shaped primarily to meet the requirements of the downtown and outlying neighbourhoods. The crucial role of transportation in shaping development along the waterfront must be recognized and exploited.

3. The Need to Reconcile Public and Private Interests

The urge to privatize is the result of several factors. Many waterfront developments are on parcels of land that are large because they were used in the past for industrial and Port activities. These large sites often attract private sector waterfront developers who tend to be builders as well as land developers, and they build substantial projects shortly after completing land assembly.

It is hardly surprising that, in the absence of clear public objectives, many of these private developers, wishing to make their projects attractive to buyers, provide them with privacy and a good view, while cutting off public access to the waterfront. In order to allow people to at least see the water, space is provided between buildings, of course, but it is doubtful that these relatively narrow openings can, by themselves, dispel

the "walled-off" feeling that now characterizes Toronto's central waterfront.

In the next five to ten years, the role of the private sector waterfront developer/builder is likely to be important and to have visible consequences, especially in plans for Etobicoke's motel strip, Toronto's East Bayfront, and Scarborough's Port Union Road area. In Etobicoke, it is possible that private sector participation might be broadened if redevelopment between the Grand Harbour project and Norris Drive proves to be economically feasible and politically acceptable. In Scarborough, potential development sites at Port Union Road are separated from the water's edge by the CN railway, making it less likely that waterfront access would be a factor in builders' plans, unless that barrier can be overcome.

When local jurisdictions require private sector builders/developers to accommodate public pedestrians along the water's edge, they are generally co-operative. They are perhaps less enthusiastic about providing rights of way or even building links to the nearest east-west arterial road. All this can be negotiated, however: municipal approvals are usually a factor when mixed uses are being sought, density limitations applied or transferred from waterlots, and other issues resolved.

Private developers are normally content to leave to public agencies the responsibility for providing significant numbers of pleasure boat slips and mooring spaces. And, because of such concerns as water quality and quantity, safety, and liability, they are not likely to seek a leading role in creating or managing beaches in conjunction with their projects.

Private property owners and occupants, both residential and non-residential, often try to limit public access to the waterfront and lateral movement along it, except at locations well removed from their properties or neighbourhoods. Like the designers and builders of mega-projects, they seek to insulate their local street systems from waterfront access roads in order to protect and, in effect, privatize their neighbourhoods. When this age-old tension between regional interests and local or private interests becomes an issue, the latter seek vigorously to defend themselves.

In order to counter the tendency toward privatization, development guidelines must support and encourage well designed, generous public rights of way in all redevelopment areas. Such requirements would promote the protection and

enlargement of public spaces; that, in turn, would allow a variety of future functions to be accommodated.

One serious consequence of fragmented, piecemeal redevelopment planning on the waterfront has been a tendency to build large developments as isolated entities, with awkward "seams" occurring between adjacent major projects such as Harbourfront/Railway Lands and Exhibition Place/Ontario Place. Moreover, in certain cases, there is a lack of sufficient emphasis on public circulation, and on links or access to surrounding areas.

There is a need to be sensitive to the impact of mega-projects and to adopt guidelines that ensure they are integrated with their surrounding areas and with each other. For example, such guidelines could require that continuous alignments for public access be preserved through a number of adjacent projects.

4. The Need for Access to the Waterfront

In the past 25 years, it has become more and more difficult to "escape" from Metropolitan Toronto into the rural hinterland that is receding before a growing population seeking recreational opportunities. For the majority of its citizens, therefore, Metropolitan Toronto itself has become a Lake Ontario "summer resort". Indeed, for most people, the waterfront will be an increasingly important recreational resource, especially if the regional population reaches the forecast six to seven million people within the next 50 years.

In recent years, this growing pressure for recreational facilities along the Lake Ontario shoreline has led the Toronto Harbour Commissioners and members of the Metropolitan Toronto and Region Conservation Authority to seek to increase the amount of shoreline being made available to the public and to increase the size of recreational areas there.

If recreational facilities are to keep pace with the growth, however, they will still have to expand significantly in size and variety; that, in turn, means public access will have to be improved and existing movement facilities expanded.

The tension between regional and local requirements stems from two often-opposed pressures: new demands for waterfront access and the need to provide that access in a way that

is compatible with, and sensitive to, local urban character. A case in point is the almost irresistible urge of so many Torontonians to reach the waterside parks, boardwalk, and waterfront of the Beach district in the City of Toronto's east end. The result is weekend congestion and infiltration of the delightful residential neighbourhood that separates Queen Street East, the area's "main street", from those amenities.

It is neither necessary nor desirable to redevelop the entire waterfront. On the contrary, a certain number of well-established residential areas in themselves lend diversity to the waterfront by contrasting with many new attractions and activity centres. In fact, some of these gaps between developments constitute the most attractive, vibrant, and successful communities in Metro.

Specific attractions of regional significance — Harbourfront, Exhibition Place, and Ontario Place, for example — clearly require major, if not dedicated, access facilities. They, and others like them, will generate heavier and more concentrated travel demand in the future; therefore, transportation facilities will have to be capable of carrying many people at relatively high speeds. However, in the face of regional pressure, nearby urban areas — particularly those that are residential — have to be protected if they are to remain attractive and secure places in which to live and visit.

Because current and upcoming transportation projects are essentially reactive, they have tended to focus on providing access to a few strategic locations in Toronto's central area and the immediate environs. While these are extremely important, they should not be served to the exclusion of others.

To disperse functions and activities across the waterfront, now and in the future, it is necessary to strengthen existing north–south links and lateral movement systems and to create new ones.

Stronger political will is necessary to earmark needed funds for improving transportation and waterfront access. Moreover, there is a need to speed the process of comprehensive transportation planning before specific development proposals are implemented. Such crucial transportation elements as a continuous waterfront promenade and rights of way for regional and local access must be defined and protected; new facilities must be built as development occurs or in anticipation of it; furthermore, the capacity and configuration of these elements must reflect the waterfront's scale and functional diversity.

The Transportation Framework

Sunnyside Amusement Park, 1949, on the city's western outskirts at Humber Bay. In this view, thousands of Easter Parade strollers promenade along the park's popular mile-and-a-half long boardwalk which was constructed in 1919-20.

Mike Filey; *Not a One-Horse Town: 125 Years of Toronto and Its Streetcars*

Photo: Courtesy Mike Filey

The Transportation Framework

A new perspective is needed, one that considers the needs of the waterfront and that gives balance and shape, now and in the future, to decisions about transportation. The proposed transportation framework gives direction and coherence to actions related to waterfront development; helps integrate various initiatives; resolves local issues; supports and promotes appropriate waterfront functions and the distribution of land uses; and anticipates future needs and opportunities and accommodates them.

We propose to build on the strengths of current transportation facilities and services by recommending changes and the introduction of additional elements that, together, would make up a transportation framework to support, promote, and guide rich, diverse waterfront development in the next critical decades. Such a framework is vital at a time when there are increased pressures for development along the entire waterfront and when several levels of government are making large investments of public money in roads, transit facilities, and other services.

The framework is a preliminary draft intended to establish a context for discussions with the public, governments, and agencies in order to reach a consensus about the future. For the most part, it is consistent with the philosophies and objectives of the four other Work Groups, as discussed at a joint meeting late in 1988.

The framework follows from six basic principles:

First, transportation plans should support and promote the economic vitality and diversity of the waterfront.

Second, transportation should be designed to take into account regional, local, and neighbourhood needs for access.

Third, transportation plans should meet the needs of people going to the waterfront to work, shop or use the many recreational facilities located there.

Fourth, transportation should be used to help create centres of activity, dispersed along the entire length of the waterfront.

Fifth, transportation should be designed to take into account movement along the waterfront and waterborne transportation.

Sixth, transportation plans must protect the waterfront heritage and comply with environmental guidelines.

Major new transportation elements, as well as existing facilities and those under construction, are shown on Map 2.

Our presentation of the transportation framework consists of three sections:

1. a survey of the existing transportation infrastructure;
2. proposed elements of the framework;
3. a discussion of waterfront transportation centres.

The Existing Transportation Infrastructure

The Toronto waterfront stretches for some 60 kilometres between the end of the Queen Elizabeth Way near Etobicoke Creek in the west, across the cities of Etobicoke, Toronto, and Scarborough, and ending at the Rouge River in the east. The waterfront is served by two main east–west arterial roads, the Gardiner/Lakeshore Corridor and Kingston Road, and in sections by public transit.

Roads

The major roads and transit lines often serve the same area — for example, the Lakeshore corridor west of the centre of Toronto — thereby providing a balance of services for drivers, commercial carriers, and transit riders.

Lakeshore Boulevard, providing four to six lanes across the entire waterfront, begins at Etobicoke Creek and runs to the intersection of Woodbine Avenue and Queen Street in the east.Between Etobicoke Creek and the Humber River, it also provides the alignment for the Long Branch streetcar line, which links directly with the Queen streetcar at an off-street loop immediately west of the Humber River.

Between the Humber River and Bathurst Street, the six lanes of Lakeshore Boulevard do not carry streetcars, and provide a high-capacity, controlled-access waterfront drive, one of the most scenically attractive in all Metro Toronto. Once Lakeshore

Boulevard crosses Bathurst Street, it effectively becomes part of the Gardiner Expressway.

East of Parliament Street, Lakeshore Boulevard, while still an inextricable component of the Gardiner/Lakeshore Corridor, once again assumes its primary function as a waterfront arterial. Finally, its six lanes narrow to four as it curves up to the Queen-Woodbine intersection.

East of Woodbine Avenue, Queen Street East is the Beach's "main street", often filled with cars and streetcars inching along, with local residents and visitors competing for space on its busy sidewalks. During parts of weekdays and on weekends, this two-kilometre section is frequently jammed as more vehicles and people jockey for room. Queen Street ends at Fallingbrook Road, in Scarborough, east of the Water Filtration Plant.

Kingston Road becomes the waterfront arterial as it continues eastward across the breadth of Scarborough. Unfortunately, the alignment is distant from the waterfront, and therefore does not have the "feel" of a waterfront arterial. However, it intersects with several north-south streets — among them Midland Avenue, Brimley Road, Guildwood Parkway, and others — that provide convenient access to parts of the Scarborough waterfront. Certainly, present auto access from this area to the waterfront is more limited than from either Etobicoke or Toronto. There is more direct access from Scarborough's extreme eastern end, via Guildwood Parkway and the eastern section of Lawrence Avenue. That portion of Lawrence Avenue has the potential for providing access to the East Point/Port Union area from both the west and, via Port Union Road, from the north.

Across Metropolitan Toronto, several north-south arterial and local streets lead to the water's edge. In addition, many local streets serving mainly residential areas in Etobicoke, the Beach area, and, less directly, Scarborough, also provide auto and pedestrian access to the waterfront. Most local streets in Scarborough offer only glimpses of the lake, and then only from significant heights above the commanding bluffs. The lack of local roads parallel to the water's edge is also a problem, especially in Scarborough.

Public Transit

Transit is provided by the Toronto Transit Commission throughout Metro Toronto, and by the Province of Ontario's commuter train and bus system, GO Transit, which links suburban and exurban communities to the metropolitan area.

GO Transit now carries more than 30 million riders a year, a number that grows steadily as service is expanded. The system's recently inaugurated eastward extension from Pickering to Whitby is the first on GO Transit-owned trackage.

GO Transit's most heavily used service is, and likely will remain, the Lakeshore East-Lakeshore West line, which now runs from Hamilton in the west to Whitby in the east, whence it eventually will be extended as far as Oshawa. In effect, virtually all stations on the Lakeshore lines help serve waterfront destinations: certain stations (e.g., Rouge Hill) are very close to the water's edge, and studies now under way are exploring the feasibility of moving the Mimico Station east, where it would significantly improve service to the burgeoning Humber Bay redevelopment and recreational area.

The TTC's subway, streetcar, and bus services are fully integrated into a single fare network carrying nearly 450 million fare-paying passengers annually, a figure exceeded in North America only in New York and (very modestly) in Chicago.

The service backbone of the Toronto Transit Commission is the subway, which approaches the waterfront at Union Station where it will have a direct "free transfer" link with the Harbourfront LRT service now under construction and expected to be in service in early 1990. The initial Union Station-Spadina section of the LRT will be in a tunnel beneath Bay Street and on a raised median on Queen's Quay West. Both eastward and westward extensions of this initially short line are already being considered; in fact, preliminary alignment studies for a westward extension from Spadina Avenue to Bathurst Street have already been undertaken by Metro Toronto and the TTC.

There are other waterfront related transit services that bear mention: the streetcars along the western section of the Lakeshore and on Queen and King (like the LRT, the Queensway section of the Queen Street route from the Humber Loop east to Roncesvalles Avenue, operates within a median, free of other east-west traffic); the north–south Bathurst streetcar route,

which connects the Bloor-Danforth subway to Exhibition Place; and TTC bus routes on most north-south arterial roads.

The Island Ferries

The Island Ferry services, now operated by the Metropolitan Toronto Parks Department, provide all-season public transportation between the Toronto Islands and the mainland.

Three routes are operated, primarily to complement the role of the islands as public parks, from the ferry terminal immediately south of the Westin Harbour Castle Hotel: to Hanlan's Point, just south of the Island Airport; to Centre Island, where the principal recreational facilities ("Centreville", etc.) are located; and to Ward's Island, where a residential community exists. During periods of low demand, a "circle route" ferry is operated to serve landings on all three islands.

In addition, there is the Island Airport ferry, which plows the 120 metres between the mainland at Bathurst Street and the Airport and then back again, making it, according to the *Guinness Book of Records*, the world's shortest public ferry ride. Although its runs are brief, the service is indispensible to the Toronto Island Airport. Studies are now under way to assess the operation and future of this vital link.

Cycling, Sailing, Flying

Some other components of the existing transportation infrastructure are dealt with in the next Section. These are: the Martin Goodman Trail, marinas and boat-launching ramps, and the Toronto Island Airport.

Elements of the Proposed Framework

The transportation framework consists of nine elements:

1. a network of waterfront trails and walkways;
2. a bicycle network;
3. waterfront scenic drives;
4. the extension of north–south streets;
5. visual access;
6. a network of parking lots;
7. a streetcar and bus network;
8. the GO rail network;
9. water shuttles, recreational boating, and cruises.

1. A Network of Waterfront Trails and Walkways

A continuous water's edge walkway, partly on landfill and including public corridors to be negotiated through proposed developments, should incorporate different physical and environmental characteristics and specific destinations. This primary walkway should be integrated with walkways and trails along the six major rivers and creeks that run into the waterfront: Etobicoke Creek, Mimico Creek, the Humber and Don rivers, Highland Creek, and the Rouge River. The walkway, in conjunction with north-south urban walkways, especially with those located in the central area, will form a network that brings people close to the water and offers them access to an array of water related activities.

In Etobicoke, the trail system is part of the official plan and is considered feasible, including access through the Marina del Rey area. It could be improved by a crossing over Etobicoke Creek in Marie Curtis Park, which would facilitate pedestrian movement to the west, towards A.E. Crooks Park in Mississauga. At the east end, a crossing of the Humber on Lakeshore Boulevard to the western beach and Sunnyside is feasible.

The Martin Goodman Trail, the Lower Don Trail, and other such amenities in the City of Toronto should be improved, and easterly and westerly extensions built.

In the east end of Toronto and in Scarborough, the boardwalk in the Beach could be linked to a water's edge trail that would eventually continue all the way to Bluffers Park and Guildwood Inn, East Point Park, Port Union, and the Lower Rouge valley. This could be done at the same time as the Metropolitan Toronto and Region Conservation Authority carries out shoreline protection programs.

An upper trail system should be put in place in Scarborough from Nursewood Road to Petticoat Creek Park in Pickering; and from Fishleigh Drive and Kingston Road to Beechgrove Drive, using sections of street, as well as existing and proposed parks along the top of the Bluffs. Potentially, the two trails could be linked via the major ravines at Glen Everest Road, Brimley Road, Bellamy Road, The Guild Inn, and Manse Road.

2. A Bicycle Network

A continuous bicycle network is needed and could become part of several of the water's-edge and waterfront drive links, including local road loops. The City Cycling Committee already has several proposals for the motel strip, the Railway Lands, the Martin Goodman Trail, York and Cherry streets, St. Lawrence Square, Tommy Thompson Park, and Leslie Street. The challenge is to integrate cycling facilities with all future redevelopment and to locate both on- and off-street bicycle trails in adjacent areas.

3. Waterfront Scenic Drives

A scenic drive would bring back the pleasure of driving along the waterfront. It should have several loops with connections to major roads that provide primary access to the waterfront, including sections of Lakeshore Boulevard, west and east, Queen's Quay, Queen Street, and Kingston Road. In Etobicoke, a scenic drive loop from Norris Drive to Superior Avenue might prove to be possible as redevelopment in the area proceeds. Two scenic drive loops could be created in Scarborough: from Brimley and Kingston roads through lower Bluffers Park, thence west on an extended fill, and back up the Bluffs via the old filtration plant ravine to Kingston Road at Fishleigh Drive; and from Morningside Avenue at the CN, east along the old Scarborough Expressway reserve, through East Point Park, across the mouth of the Highland Creek to Port Union Road.

A distinctive design, which would give the waterfront drive a strong sense of continuity and connection to the waterfront, is needed here.

4. The Extension of North–South Streets

Many major north–south streets (see Map 1) should be extended to the water's edge. Some provide regional access from freeways, transportation terminals, and city centres, while others provide local neighbourhood access. Each type should be differentiated by design and scale: regional streets should support higher levels of activity at the waterfront. The primary east–west access drive should provide the appropriate connections to waterfront destinations. Streets in Scarborough and Etobicoke have an insufficient number of rights of way to the water's edge. This problem must be examined very carefully and appropriate solutions sought.

5. Visual Access

Graceful waterfront cities of the world are characterized by a waterfront that provides broad vistas and interesting visual experiences throughout its length. Toronto's waterfront has these qualities. From Lakeshore Boulevard at Sunnyside we see a broad vista of parkland, with the Lake as horizon, and a sweeping view of the city. Travelling eastbound on the Gardiner, we see at the Etobicoke motel strip a view of Humber Bay, framed by the distant towers of the City of Toronto, that is truly breathtaking. This from the Gardiner Expressway, a facility that has not always been noted for its contribution to aesthetics.

In the Central Area, views have a different quality, as the foreground is punctuated by waterfront buildings, and the background is framed by the Toronto Islands.

In Scarborough, views have a different quality again. The sheer height of the Bluffs gives a view of the water that is often a surprise.

Currently, visual contact with the waterfront is being enhanced with additional parkland and increased opportunities to reach the water's edge. There is increased awareness of the socio-economic benefits of the visual component of waterfront planning. At the same time, development is in some instances blocking or narrowing views of the waterfront, or reserving these views for private patrons.

A crucial role for planning agencies and the public is to retain and enhance these vistas, and create additional opportunities which would enrich the visual experience of the waterfront.

6. A Network of Parking Lots

A network of parking lots is needed for visitors who wish to drive to the waterfront. A series of small- to medium-size parking lots should be located strategically along the scenic drive and close to major access points and intersections with the waterfront streetcar line. Lot sizes should vary according to location, level of accessibility, and the number of waterfront activities in the immediate area. Parking provided at parks, marinas, and other locations should be integrated into a full network, with appropriate design and operational guidelines.

7. A Streetcar and Bus Network

The waterfront streetcar line must be extended. The LRT currently under construction between Union Station and Spadina Avenue will serve workers and visitors headed for the central waterfront, either to work there or for recreation in such facilities as SkyDome, the Antique Market, and Queen's Quay Terminal. The LRT provides a direct link with the subway and the GO rail network, a promising beginning in connecting regional and waterfront public transit with each other. However, if the LRT is to be a significant part of the area's transportation system and, in particular, if it is to enhance access to the waterfront, it will have to be extended west and east now, and be integrated with other streetcar services on King and Queen streets (in the west, through Exhibition Place and via existing trackage on Dufferin Street or Coxwell Avenue), and on Bathurst Street and Spadina Avenue. As the waterfront LRT is extended, provision for "through (no transfer) routing", in combination with existing streetcar services should be a key design and operating criterion.

Properly designed, a waterfront streetcar line could become an attractive and useful facility, which might stimulate intensified and diversified land use at specific locations, such as Ontario Place/Exhibition Place, St. Lawrence Square, East Harbour, and Greenwood Racetrack.

Extending the waterfront streetcar line and integrating it with other lines will strengthen the transit presence and its role in shaping land uses along the waterfront. This network must be supported by bus lines and, where appropriate, these lines should also come to the water's edge. Service should be considered along the scenic drive including some loops. Bus service should also be designed to meet transit demands from the "waterfront centres", peripheral parking lots, and special attractions along the waterfront.

8. The GO Rail Network

The current GO rail network, especially the Lakeshore line in full service, provides critically needed commuter service to special events along the waterfront at Ontario Place/ Exhibition Place, (shortly) SkyDome, and others. The Government of Ontario is planning to extend and expand the GO rail lines and service in the near future. GO Transit's role would be to make the waterfront regionally accessible

by integrating the Lakeshore stations with streetcar and bus lines, and by increasing service frequency to and from Union Station on some of the other lines. Consequently, it would be possible to intensify multimodal land use in some locations.

9. Recreational Boating and Cruises

The increased demand for sailing and sportfishing will mean a need for more public access to the water's edge, as well as for boat storage and launching facilities; in Scarborough, specific facilities are needed at East Point Park, to reserve space in the water for boats.

There will also be a greater call for tours, and it has been suggested that cruise ships might once again make stopovers at the Port of Toronto. All this waterborne activity, with its ancillary clubhouses, marinas, terminals, etc., would combine to make a fascinating sight. The possible use of *vaporetti* to shuttle commuters across the waterfront might require cutting a new channel across the Leslie Street Spit.

Waterfront Transportation Centres

At certain strategic waterfront locations several modes of transportation can come together. This gives us the opportunity to create waterfront transportation centres to provide easy access among modes. They could be located at places where expressways and GO Transit can feed into large parking facilities, which are convenient for bus and streetcar connections, and also offer direct access to the waterfront.

Because many modes of transportation meet at the waterfront transportation centres, they can be considered as "Gateways to the Waterfront". They will provide easy and enjoyable access to the waterfront for people arriving from near and far.

They will also provide a welcome service for those visiting the City — the "Park-and Ride" system serves those arriving from outer areas by enabling them to do the last stage of their journey by transit, thus relieving congestion on City streets.

Transportation always has an association with development potential. We can use this to support more intensive land use at the centres, including housing, offices, and recreational activities. In turn, the excellent transportation connections

available at the centres, by supporting development at the centres themselves, could relieve pressure on the rest of the transportation system.

The advantages to be derived from these waterfront transportation centres are impressive.

They include:

1. easy transportation interchange;
2. easy access to the waterfront;
3. park and ride opportunities;
4. integration between transportation and intense waterfront activities;
5. reduction of waterfront congestion;
6. protection of neighbourhoods;
7. a logical framework on which to organize development;
8. making use of the entire length of the waterfront.

Possible locations for waterfront transportation centres are indicated by red disks on Map 2.

Implementing the Framework: Local Issues

We have identified fourteen areas where implementation of the transportation framework could be assisted or obstructed. These areas include projects planned or already under construction, some proposed changes of use, and some new opportunities for movement and access. The fourteen areas, which are indicated on Maps 3 and 4, are:

1. Lakeshore Psychiatric Hospital site;
2. Etobicoke motel strip;
3. Ontario Place/Exhibition Place;
4. Fort York District;
5. Harbourfront and the Railway Lands;
6. Toronto Island Airport;
7. SkyDome;
8. Union Station;
9. waterfront streetcar LRT line;
10. Gardiner Expressway;
11. East Bayfront;
12. Port of Toronto/Leslie Street Spit;
13. Greenwood Racetrack;
14. Port Union District.

1. Lakeshore Psychiatric Hospital Site

Called the Ontario Hospital when it opened in 1890, the hospital was located amongst rolling lawns and tall trees in cottage country near enough to the City to be easily accessible to staff. There have been proposals that the handsome site be redeveloped for housing, as an amphitheatre, and for public recreation. It has also been suggested that Kipling Avenue be extended southward and the ring road through the site be retained.

Because of its original use, the site was never integrated with nearby residential communities and it lacks a continuous pedestrian corridor to the water's edge. Now that the hospital has been closed, there is a unique opportunity to open the entire Etobicoke waterfront to public access, which must be protected in any future development, and to consider extending Kipling Avenue as a gateway to the water's edge. Certainly, the parcel has exciting possibilities: it could be integrated with Humber College and the land owned by the Metropolitan Toronto and Region Conservation Authority and pedestrian walkways extended both east and west, along the water's edge, to consolidate the site with surrounding communities.

2. Etobicoke Motel Strip

The Strip is noisy, a physical and visual barrier to the lake, in part because such major transportation facilities as the Gardiner Expressway, the main line of the CN Railway, GO Transit, and Lakeshore Boulevard separate it from the rest of the urban area.

Despite the presence of so many transportation routes, service is inadequate for higher densities and transit access is by TTC streetcars or buses only – making the trip to downtown Toronto slow going.

Existing parcels of land, and the strip itself, are narrow and long, which would necessitate land assembly if comprehensive redevelopment were being considered. However, proposals for high-rise residential development to the water's edge, with a minimum of public space, conflict with existing policies.

The Official Plan proposes roads and pedestrian walkways, a need the public sector acknowledges and is willing to provide along the water's edge. These would make possible pedestrian connections to the Humber River and to Mimico Creek.

With some reorganization, transportation facilities and services could support redevelopment of the strip. For example, the City of Etobicoke, in co-operation with the Ministry of Transportation, is assessing the feasibility of relocating Mimico's GO station closer to it and to Humber Bay Park.

3. Ontario Place/Exhibition Place

The 1989 opening of SkyDome is one of several factors that have led to a major re-evaluation of the respective roles of Ontario Place and Exhibition Place. Ontario Place, developed in 1971 on filled land immediately adjacent to Exhibition Place, was modelled on the physical concept for Expo '67, Canada's centenary birthday celebration in Montreal.

Although the two are physically close, they do little to enhance each other: Lakeshore Boulevard, which separates them, is crossed by two pedestrian bridges owned by Ontario Place in an area dominated by large parking lots, fences, and other barriers, as well as noisy, high speed traffic on a six-lane arterial road. This is the time for a joint planning exercise, with a clear-cut agenda and firm goals, including ease of accessibility by all forms of transportation, but particularly by public transit. A joint parking strategy would enable the two to phase out surface lots and would make the area more attractive. Sound economics, as well as sound marketing, would suggest that they provide year-round access to their combined waterfront area.

In addition to better integration between Ontario Place and Exhibition Place, there is a need to integrate them both more harmoniously with their surrounding areas; with the entire waterfront; and with such upcoming projects as the Front Street extension.

There are many benefits to such co-ordinated planning: the ability to define complementary roles that expand the number and kinds of amenities and activities available to the public; strengthened justification for early extension of the waterfront LRT; improvements to the economic health of both places; and a combined resource that would make both Ontario Place and Exhibition Place attractive venues for the 1996 Olympics and the proposed 2001 World Exposition. But they require joint planning and co-operation.

4. Fort York District

Fort York is a rarity: the only archeological site in Toronto containing evidence of 8,000 years of human settlement, a Heritage Conservation District under Ontario's Heritage Act and, more recently, designated by the federal government as a National Historic Site. Although Fort York has never moved, the City has and, as a result, the Fort, its garrison commons, and military cemetery are surrounded by transportation corridors: first rail and now the Gardiner Expressway. Today, only the most determined visitors enjoy this fascinating but virtually inaccessible historic site.

Among current and upcoming projects near Fort York are the proposed extension of Front Street from Bathurst Street to Strachan Avenue and the Gardiner Expressway, and the possible extension of The Esplanade west from Bathurst. With significant projects under way or planned on its periphery, Fort York could become the centrepiece of an important historic district; it could be the link between waterfront neighbourhoods to the east and west and could tie the waterfront to neighbourhoods to the north.

Complementary proposals should be developed immediately to provide pedestrian access and extend bicycle trail networks.

A broader planning approach and a commitment to establish new movement networks in the vicinity of Fort York require unflagging co-operation among a number of interest groups, including the Toronto Historical Board, the City of Toronto, Metro Toronto, and adjacent landowners.

5. Harbourfront and the Railway Lands

Harbourfront Corporation, formed in 1976, has jurisdiction over 40 hectares of land that extend south of Lakeshore Boulevard from York Street on the west to Stadium Road on the east. The nearby Railway Lands comprise holdings of CN Realty, Marathon Realty, Canada Post, the City of Toronto, and the Corporation of Metropolitan Toronto, totalling some 80 hectares, lying north of Lakeshore Boulevard between Yonge and Bathurst streets.

The two parcels share a common "seam" along the Gardiner/Lakeshore corridor for approximately two kilometres. Among the cross streets are Bathurst Street, Spadina Avenue, John/Rees and York streets. New crossings are planned at Portland

and Simcoe streets; in addition, there will be a number of pedestrian crossings in the future.

Until recently, there was relatively little pedestrian or motor traffic across the Harbourfront/Railway Lands boundary but, with intensive development of the two sites, and the construction of SkyDome, circumstances have changed dramatically. The Gardiner/Lakeshore transportation corridor, once located on an isolated stretch of an industrialized port, is today part of an increasingly dense urban area.

Therefore, it is crucially important that every possible opportunity be taken to provide a large number of crossings for pedestrians moving to and from the waterfront. It is equally vital that redevelopment proposals on both sides of the corridor meet the need for pedestrian and vehicular crossings, and be sensitive in terms of site planning and organization to preserve sight lines and enhance the sense of approach to the water.

At present, the tendency of both Harbourfront and the Railway Lands is to turn away from their admittedly difficult common boundary. Clearly, if workable links to the waterfront are to be forged, the time has come for the responsible corporations and groups to abandon the traditional preference for treating Harbourfront and the Railway Lands as if they were two solitudes. Doing that will mean that a number of development groups, as well as the City of Toronto and Metro Toronto, must be willing to work co-operatively to achieve common goals and the common good. Moreover, they must forge a consensus on the future of the Gardiner/Lakeshore corridor, in the short, medium, and long term to guide current actions.

6. Toronto Island Airport

In view of the Island Airport's location, two kilometres from the downtown core, its most obvious role is as a facility for business travel. Although that market does not consider cost a prime criterion, it does demand a high level of service, convenience, and reliability. All three elements are noticeably missing from current operations: service is inadequate, connections to mainland transportation are poor; scheduling is undependable; and facilities for handling passengers are antiquated and uncomfortable. Moreover, the potential of the Island Airport is limited by space at the Airport itself, as well as by the restricted range of the aircraft currently authorized to serve the Airport.

There have been many proposals for improving Airport access, some of them too expensive to justify, given the traffic they would generate.

We have considered three basic options representing a range of convenience, impact, and cost. Access costs have been estimated for the suggested options. Because operating costs for the ferry are substantial in comparison with those for tunnels, they have been capitalized and added in, so that the total costs of each of the three options are comparable.

First: the ferry could be converted to passenger use, to provide a shuttle every five minutes between reception and departure buildings on opposite sides of the channel. Vehicles, which slow up service, would be carried by other vessels. The cost of this option is estimated to be $10 million: $2 million each for the improved service and the needed buildings, and $6 million in capitalized costs of operating the ferry.

The second option is a tunnel with a "people mover", reception and departure buildings to be constructed at either side of the gap. The cost of the tunnel is estimated at $14 million and of the buildings at $5 million, for a total of $19 million.

The third option is a vehicular tunnel, for either a shuttle bus to the terminal or for private cars; it is estimated that the tunnel would cost $35 million and buildings another $10 million, for a total of $45 million.

In our view, it would be difficult to justify investment in excess of $40 million to accommodate 2 million passengers annually, or even the cost of the pedestrian tunnel for 1 million passengers annually, particularly at a time when there are so many other projects competing for the transportation dollar. The appropriate solutions and amount of investment can be determined, however, only after a decision has been made on the number of people the Airport can and should serve, as determined by market, equipment, and environmental considerations.

In making judgments about access, it must be emphasized that the number of passengers currently using the Island Airport is not restricted by access considerations but, rather, by lack of adequate service. More efficient operations are needed if the expectations of business travellers are to be met.

It has been suggested that larger planes, such as the Dash 8/300, be introduced in order to extend the range of flights and increase traffic at the Airport. But that would cause serious environmental concerns for which there may not be solutions. Certainly, the impact of noise and other elements on the environment would have to be monitored closely if such an initiative were being considered. Noise impact standards must be developed and maximum levels established that would be acceptable to residents of and visitors to such nearby precincts as the Etobicoke motel strip, Ontario Place/ Exhibition Place, Harbourfront, and the Toronto Islands.

7. SkyDome

While the opening of the stadium, with its retractable roof, is the subject of great popular interest, the traffic before and after events there could cause congestion on north–south streets serving the waterfront. However, imposition of access restrictions, one-way streets, and parking prohibitions — immediately before and after heavily attended events — may divert some traffic to Queen's Quay and other waterfront routes.

At present there are no fully developed plans for channelling pedestrian movement between SkyDome and Harbourfront and pedestrian links between SkyDome and Union Station still require additional work; for the time being, road construction around and approaching SkyDome will affect waterfront access and circulation. Certainly, once there is activity at SkyDome, it will be imperative to develop a strategy to reduce traffic congestion, eliminate the perceived shortage of parking, and structure transit fares to support waterfront activity.

Operations in affected areas of the waterfront must be improved. Pedestrian connections between SkyDome and other nearby amenities, and planning joint marketing programs with them, would encourage SkyDome patrons to visit other parts of the waterfront.

8. Union Station

Union Station is, and probably always will be, the focus of the Toronto region's public transportation system, the key access point to Toronto's central business district, as well as to the central waterfront. The direct transfer between GO Transit and TTC services makes Union Station's regional role even more significant.

But a multiplicity of operating and administrative agencies with control of the Union Station complex limits its usefulness as a fully efficient transit hub for Toronto's Central and Bayfront areas. It is absolutely essential that co-ordinated — indeed, co-operative — planning efforts take place in the public interest so that Union Station can offer the services needed to satisfy an ever increasing population of travellers and of downtown workers, residents, and visitors.

A fully integrated, well signed, attractive, secure, and fully accessible walkway system must be treated as a priority; it will mean creating several new north–south pedestrian routes (the teamways; the "Blue Route"), and dramatically improving east–west links via the "moat" and through the station building itself.

Since it opened for business in 1927, Union Station has had only one "front door", facing north into the City. Burgeoning development to the station's east, south, and west now make it essential that it be accessible on foot from all cardinal directions, and — like New York City's Grand Central Terminal — become the hub of the Central Area's pedestrian system, with secure, convenient walkways in all directions. It must become a true centre of the City's movement system, rather than just for those using trains.

The current link — a single draughty passage across the "moat" connecting the GO Transit concourse and the financial district, running through the constricted subway station mezzanine — is a source of frustration. It is uncomfortable and totally inadequate for the number of users today. Obviously, it will become a roadblock to pedestrians as redevelopment proceeds on all sides of Union Station: to the west on the Railway Lands; to the northwest in the block between Yonge and Bay (BCE Place, etc.); and to the south in the Central Bayfront area.

Many of the needed improvements must be made in the short term. For example, the four existing teamways (those adjacent to the east and west sides of York and Bay Streets) must be extended, as must the "Blue Route" from the existing GO Transit concourse. All these would emerge into the open at the south side of the new, narrowed rail corridor. It cannot be emphasized strongly enough that the work must be done before the new freight "high line" tracks are built along the south edge of the passenger train corridor, if the extremely high cost of tunnelling under "active" tracks is to be avoided.

Jurisdictional and "territorial" problems cited by Toronto Terminal Railways (TTR), VIA, and other occupants of Union Station, must be overcome in order to complete a readily identifiable east-west pedestrian concourse, which would run through the western half of the terminal, then over York Street and through the building currently being redeveloped at 20 York Street, and, from there, toward the SkyDome area. There must be more and better links between the TTC subway station and the GO Transit concourse, and between them and these walkways. Overcoming such jurisdictional problems as TTR's lease with Tilden, intergovernmental disputes, and the like are essential to improving Union Station for the public good.

The imminent opening of SkyDome has been a welcome spur to action, but there are concerns that many essential, albeit generally small-scale, amenities, including access for the handicapped and clear signage, may not be put in place in the near term.

9. Waterfront Streetcar LRT Line

The Bay Street–Queen's Quay (Harbourfront) streetcar line between Union Station and Spadina Avenue is the first light rail transit (LRT) expansion in Toronto since 1928.

While the short line now under construction will have limited impact on waterfront access and circulation, it will serve riders coming from other parts of the City and the region, whether to work in the Harbourfront area or to enjoy its recreational facilities. The fact that it will have a climate-controlled link with GO Transit and the TTC subway at Union Station makes it especially attractive. However, if it is to play the fullest possible role in the transit system and, in particular, if it is to enhance waterfront access, it will have to be extended east and west in the very near future, and direct links with existing streetcar lines will have to be provided.

General feasibility studies, largely concerned with identifying alternative alignments, have dealt with extending the streetcar line west, but no study has yet been made of an extension west of Bathurst Street, to Ontario Place/ Exhibition Place.

Emerging redevelopment in the East Bayfront, at St. Lawrence Square, and in the Port area suggests that at least conceptual planning of a line east of Bay Street should be undertaken immediately. This could be done in conjunction with planning the LRT extension west of Bathurst Street.

The need for additional links between the east–west waterfront trunk LRT line and the existing streetcar network should be integral to any planned expansion of the LRT system. Bathurst Street and perhaps the Queensway past Roncesvalles Avenue should be considered as connections west of the Toronto Central Area, while Parliament Street and the Coxwell/Queen/Kingston Road area are possibilities to the east.

Planning for eastward and westward extensions of the Harbourfront LRT, as well as for links with the existing streetcar network, should be undertaken as soon as possible, so that it is done in lock step with planning for major redevelopments of Ontario Place/Exhibition Place, St. Lawrence Square, the East Bayfront, and, eventually, Greenwood Racetrack.

An attractive, well designed waterfront LRT line could effectively tie together the entire waterfront between the western limits of Metro, at the Long Branch loop, and the existing "ends of steel" at Neville Park (Queen Street) and Victoria Park (Kingston Road). (In fact, it might be a good idea, after a lapse of 50 years, to bring back at-grade rail service on Kingston Road east of the City of Toronto boundary.)

The east–west expansion of LRT service could well stimulate intensified, diversified land use at points where the new line provides links to the existing system. At those points, and at appropriate "gateways" (e.g., Lakeshore Boulevard at the western limits of Metro, Kingston Road at Victoria Park), large parking facilities could be provided, at rates and with pedestrian routes that would encourage visitors to leave their cars and use public transit. These intermodal "gateways" would complement current initiatives in the Greater Toronto Area that have been undertaken by the Ministry of Transportation.

10. Gardiner Expressway

Thirty five years ago the Gardiner Expressway was envisaged as part of a comprehensive network of urban and regional freeways, several segments of which were not built, and probably never will be. Therefore, the Gardiner's future role

in supporting the growth and vitality of the Central Business District has to be considered in a transportation context that is different from the one in which it was originally conceived.

Current descriptions of the Gardiner as a vital transportation and economic corridor to the central area are borne out by recent traffic surveys: the Gardiner has a daily volume of 150,000 to 165,000 vehicles, with 80 per cent of peak hour traffic destined to /originating from the Central Business District (while only 20 per cent is through traffic); in peak hours, trucks comprise 10 per cent of the traffic, and in off-peak times 20 per cent. It is estimated that by 2001, just 12 yearsfrom now, if present trends continue, peak volumes will increase 20 per cent and may be even higher when SkyDome's estimated 200 special and sporting events per annum take place.

In other words, the Gardiner still plays a critical role in the economic life of downtown Toronto, but, according to some scenarios, might be less critical in future. What can be said with certainty is that the Gardiner will require continued investment for maintenance and that, especially underneath and beside elevated sections, it is noisy, dirty, and oppressive. The air quality in the vicinity is poor as is the visual environment, which is filled with flashing advertising signs that, in some cases, obscure the waterfront.

Proposals for the future of the Gardiner include:

1. widening it;
2. running it in a tunnel under the lake; and
3. tearing it down.

There have also been suggestions for improving it: a recent civic design study by the City of Toronto recommended improvements to portions of the corridor, including better lighting and general design under the elevated sections, especially on the north–south crossings, improved pedestrian links between the Railway Lands and Harbourfront below the level of the Gardiner and above that of Lakeshore Boulevard, and the demolition of the eastern leg of the Gardiner, from the Don Valley to Leslie Street. The proposed Front Street extension is intended to reduce the traffic congestion on north–south approaches to the Gardiner and a proposed corridor traffic management system would encourage diversion and redistribution of trips into the downtown and reduce accidents, while improving attainable speeds; a proposal to increase the

Gardiner's capacity by adding lanes to the west is also being developed by Metro.

Looked at as a whole, current official plans lend support to increasing the traffic on the central portion of the Gardiner while improving environmental and development standards through a range of civic design measures and development opportunities. Within this array of plans and proposals, we see three broad options: retaining and improving the Gardiner in its present form; removing it and replacing it with a tunnel facility in the same or an alternative alignment (as is currently being done in Boston); or gradually phasing it out and removing it in segments, after adopting a broad array of transportation and land-use measures that would gradually diminish the need for the existing elevated portion.

Included in that array of measures are: creating protected pedestrian walkways within the teamways through the Railway Lands to decrease conflicts between motorists and pedestrians; building the Front Street extension to the Gardiner; placing more parking lots at the periphery of the Central Business District; improving the continuity of such roads as The Esplanade, Lakeshore Boulevard, and Queen's Quay; improving north–south road links between the downtown and the waterfront; providing express buses on dedicated lanes to connect with regional transportation gateways; and extending the LRT line east and west, and encouraging housing in the Central Area.

In examining the options, the Work Group discarded the second one — that of the Gardiner-type corridor under the lakefront — because it is costly and unrealistic, given the current competing claims on all levels of tax revenue and the urgently needed transportation improvements for the waterfront.

We do not believe the Gardiner should be replaced. Clearly, work to beautify and improve the environment in and around the Expressway is long overdue and the relevant governments and agencies should pursue the urban design recommendations in the report of Roger du Toit et al, dealing with the Gardiner/Lakeshore Corridor Civic Design Study.

We believe that it is sensible to concentrate on the many initiatives identified as supporting the dismantling of the Gardiner, but it should be clear that each is sound on its own, and does not have to be considered solely in the context of the

third option. The Gardiner does, after all, serve a vital purpose and is unlikely to become expendable in the short or medium term.

If all the initiatives were implemented, they might make it feasible to tear down the central portion of the Gardiner, but it is also conceivable that, these projects notwithstanding, there might be sound reasons to retain it. The sheer magnitude of growth in commercial, recreational, and residential floor space taking place west of University Avenue and south of King Street is likely to justify retention of the Gardiner-Don Valley link — the Central Area's only continuous controlled-access road — into the indefinite future.

In our opinion, it is not possible at this time to make a pronouncement on the final disposition of the Gardiner Expressway. There are measures we can adopt which will reduce its importance, but they might not be sufficient to eliminate the need for it altogether. Present trends indicate that it will continue to be needed, but these trends could be reversed by national policies and international events, assisted by our own efforts. So our recommendation is to keep the third option alive as a possibility, by embracing various measures to reduce the importance of the role of the Gardiner; measures which would have a beneficial effect on waterfront transportation generally.

As the initiatives suggested throughout this Report come into operation, there will be ample opportunity to evaluate the efficacy of alternatives to the Gardiner and to decide whether it is a necessary and appropriate transportation corridor at that time. It is essential, however, to begin to develop the edges of the corridor so that, should it come down, it will be worthwhile and, in any case, so that we do not worsen the barrier condition.

The Work Group endorses the recommendation to proceed with demolition of the eastern leg of the Gardiner between the Don Valley Parkway and Leslie Street, and to replace it with a surface boulevard.

11. East Bayfront

The East Bayfront area south of Lakeshore Boulevard between Yonge and Parliament streets will play a critical role in the opening up of the waterfront. Therefore, plans for the portion of St. Lawrence Square north of Lakeshore Boulevard; plans to realign Lakeshore Boulevard through the Canron lands in

order to rationalize the awkward junction of the Lakeshore and Cherry Street; and proposed improvements as set out in the Gardiner/Lakeshore Civic Design Study, must be evaluated in the context of the whole East Bayfront area, and broadened north–south and east–west linkages.

Preliminary proposals for redevelopment in this area have been made by the City and by various private developers over the past five to ten years. The 4-hectare Marine Terminal No. 27 is already in private ownership. Concepts include a mix of uses, largely residential, but including some "benign industry" and retention of the Redpath sugar plant.

It is essential, in planning for the East Bayfront area, to extend the waterfront LRT (streetcar) line; therefore, the alignments and operations of such an extension must be considered immediately. New uses of parts of the Gooderham and Worts (G & W) Distillery and the redevelopment of St. Lawrence Square may, in themselves, justify a start to the extension of this line east to Parliament Street as early as the mid 1990s, connecting it to existing tracks on King Street. A loop adjacent to or even within the G & W "historic precinct" might permit operation of antique streetcars (owned by the TTC and the Halton Radial Museum), equipped with 1.495 metre gauge TTC trucks, during the summer tourist season. These options underline the urgent need for a public agency/private developer planning process.

Consideration must also be given to how remaining industries located east of Yonge and south of Lakeshore Boulevard will relate to any large new mixed-use and residential precincts that might be developed. There would be visual, noise, and odour problems to contend with and, equally serious, the long-term effects of the heavy truck traffic associated with industry and with residual industrial port operations.

12. Port of Toronto/Leslie Street Spit

Taken together, the Port of Toronto and the Leslie Street Spit form the largest expanse of sparsely developed land on the Metropolitan Toronto waterfront.

Port of Toronto

The Port of Toronto site, comprising more than 550 hectares of land, is adjacent to three arterial roads — the Gardiner Expressway, Lakeshore Boulevard, and the Don Valley Parkway. It has convenient rail access: CN and CP lines and

GO Transit service run adjacent to the site; many spurs extend into it; and proposed LRT service could be extended through it. The area is penetrated by the Keating Channel and the Ship Channel, which are edged with nine kilometres of dock wall, a significant investment that presents an argument for keeping the Port in its present location. The Martin Goodman Trail brings cyclists and joggers through the area, and numerous marinas provide access for boaters. Cherry Beach is popular with picnickers, paddlers, and windsurfers.

The amount of tonnage going through the Port has been declining steadily, and some cargoes — coal for the Hearn Thermal Generating Station, for example — have disappeared completely, while most petroleum shipments have been diverted to Clarkson. Many cargoes have diminished in size because Montreal has become the preferred all-season point of entry to central Canada, and the Seaway is considered unreliable. It is likely that the Port's role as a regional facility will decline further, but it may remain important to Toronto as it reduces the need for truck traffic in the area.

Faced with these realities, two recent proposals for the future of the Port of Toronto have been made: one by the Toronto Harbour Commissioners and the other by Shoreline Engineering, a consulting firm headed by the Commission's former Chief Engineer. The Harbour Commissioners proposal calls for 120 hectares for the Port of Toronto; 100 hectares to be devoted to industrial uses; 60 to business; none to residential; and 60 to recreation. Shoreline Engineering, on the other hand, sets aside no land for business but 210 hectares for residential; 40 hectares for the Port; 30 for industrial use; and 60 for recreation.

It would be wise to preserve options for future water traffic by holding in reserve a large area of waterfront land — perhaps 50 hectares — for future Port uses; if that were done, the reduced industrial acreage proposed in the Shoreline Engineering plan could probably be safely adopted.

Irrespective of the precise future of the Port, however, there is an urgent need to extend the City's street network and public transit corridors into this vast area, as well as easements for utilities, and a system of pedestrian and open space linkages that would establish a public infrastructure to guide any redevelopment of the area. In the absence of such an agreed-on comprehensive plan, critical opportunities to preserve future access are being lost.

Leslie Street Spit

Access to the Leslie Street Spit is available from Lakeshore Boulevard (by bus as well as by car), the Martin Goodman Trail, and a marina. There is no need to provide access to the total area; indeed, some of it should be set aside as a wildlife refuge. Movement along the Spit is possible either on foot or by shuttle bus. The area lacks overall integration with the rest of the waterfront; there is only limited public parking for visitors and no identifiable transportation hub.

There is an opportunity to further develop Tommy Thompson Park as a public resource. A small gap in the Spit with a swing bridge could be created, to allow small boats continuous protected access along the waterfront. At present, the Spit forces small boats out into unprotected water. It would be desirable as well to integrate various modes of access and modestly increase the amount of available public parking. However the site should be preserved largely for environmentally sensitive, low-intensity recreational use. For example, because the primary modes of travel on the Spit are by foot or on bicycles the east–west bicycle and pedestrian routes should be extended. The relationship, in access terms, of this natural preserve to the large new marina currently under construction must be carefully considered.

13. Greenwood Racetrack

Eventual redevelopment of all or portions of the Greenwood Racetrack site (in combination with nearby Ashbridge's Bay Park) offers great potential to create a significant new area where transportation and land uses converge, making more intense development possible. If housing were developed, it would integrate naturally with existing neighbourhoods and provide another new community close to the waterfront and Toronto's Central Area.

A large part of the Racetrack site is used for the track itself and for stabling, while the rest is dedicated to surface parking. Public transit access to Greenwood, which is close to the waterfront and the Beach district, is by Queen Street or Kingston Road streetcar; while motorists primarily use Lakeshore Boulevard and the Gardiner Expressway.

The land is becoming too valuable to be left as surface parking and the Racetrack itself is a sore point with nearby residents who complain of litter, noise, crowds, and traffic

generated by its patrons. A possible solution, even if the Racetrack were to remain, would be to build multi-level parking, freeing up portions of the site for mixed use, including housing. In addition, a streetcar line looped through the site, and linked to the Queen streetcar service, and eventually with the extended waterfront LRT service, would deposit and pick up Racetrack visitors there, rather than requiring them to wait for public transit near residential streets. It must be remembered, however, that the Racetrack operates under the regulations of the Ontario Racing Commission, a provincial body, which might someday decide to move the entire facility elsewhere.

14. Port Union District

At present, there are few places in Scarborough with ready access to the waterfront. In the Lawrence Avenue/Port Union Road area, however,there are many large properties, previously used for industry, that are becoming available for redevelopment almost simultaneously. Adjacent to the shores of Lake Ontario, they could offer ready access to the Rouge Hill GO station, as well as to the Highland Creek and Rouge River trail systems that already provide some access to the lake from areas to the north.

Given the favourable combination of circumstances, there is an important chance to redevelop the site and create a significantly enlarged area of accessible lake frontage. Such action will require the co-operation of landowners, the City of Scarborough, and the Metro Toronto and Region Conservation Authority, among others.

Island Ferry Docks, 1927. Ever since the early 1830s, Torontonions have made their way to the Island (until 1858, a peninsula) on board a ferry boat of one kind or another. In the 1920s, a new waterfront was created by the Toronto Harbour Commissioners which included a modernized ferry terminal built on land reclaimed near the foot of Bay Street.

Mike Filey: *Not a One-Horse Town: 125 Years of Toronto and Its Streetcars*

Photo: Courtesy Mike Filey

Recommendations

Recommendation 1: Waterfront Planning

We recommend that much greater proportions of the planning resources in the affected munipalities be applied to securing the public's interests on the waterfront. A more proactive approach to waterfront planning is particularly critical if space and facilities are to be provided in future for public access and movement.

Recommendation 2: The Transportation Framework

We recommend that the draft framework be submitted to each of the key participants in waterfront planning: the cities of Etobicoke, Toronto, and Scarborough; the Municipality of Metropolitan Toronto; the Province of Ontario; and other affected groups and agencies. Discussions and negotiations should begin to refine the framework and adopt it as the basis for concerted actions — as an integral part of Metroplan.

Recommendation 3: Waterfront Transportation Centres

We recommend that highly specific local studies be undertaken, involving appropriate participants, to examine the potential for integrating planning and development initiatives in support of such centres.

The same critical areas have been identified by virtually all the Work Groups as potential centres or foci where more intensive public use should occur. The centres (see Map 2) must be supported by appropriate movement networks.

Recommendation 4: Transportation Investment

We recommend that an integrated approach be adopted for planning and building new facilities.

We have identified a wide variety of such initiatives, which will result in the spending of many billions of dollars of

public and private funds over the next decades. Unfortunately, however, individual projects are often planned in isolation, executed at cross purposes with each other or are simply being brought forward too slowly and too late.

The transformation of the Toronto waterfront will reorient transportation systems to reflect the area's increased importance — in fact, that complex, expensive process is already under way.

Recommendation 5: Co-ordinated Capital Works Program

We recommend that a co-ordinated capital works program be established by various levels of government and the private sector; it could be speeded up or slowed down, depending on the rate of development and the need to accommodate such special events as the Olympics or a World Fair.

Recommendation 6: Specific Issues for Immediate Action

In addition to the broad issues dealt with in the above recommendations, and the general initiatives proposed in the transportation framework, we contend that a number of specific problems require immediate action. We recommend, therefore, that they be examined in greater detail and with a sense of urgency. They are:

- defining the role and function of the Toronto Island Airport, and future access to it;
- implementing an agreed-upon comprehensive plan for pedestrian movement in and around Union Station, the region's major public transportation hub;
- taking all necessary steps to ensure that pedestrian links to and from SkyDome are adequate and are put in place as quickly as possible;
- setting out now the best route for a continuous LRT waterfront transit line;

- developing a comprehensive public infrastructure plan, including new streets, pedestrian connections, and transit rights of way for re-utilization of the Port lands, before such Port area projects as theToronto Harbour Commissioners' industrial subdivision or the Dover Elevator proposals are approved. The policy should give first priority to safe-guarding the public interest;
- carefully examining critical redevelopment areas to ensure that objectives for access and movement are met. These areas include: the Lakeshore Psychiatric Hospital site and the motel strip in Etobicoke; Marine Terminal 27; the Polson Street Slip; the Canron/Victory Soya Mills site; and the proposed Bathurst-Spadina neighbourhood within the Railway Lands, all in the City of Toronto, and the Port Union District in Scarborough;
- integrating plans for the future of Ontario Place and Exhibition Place.

Recommendation 7: Specific Issues, Long-Term

In addition to problems requiring immediate action, there are issues that will require long term attention. In the context of the transportation framework we recommend that the following serious issues be considered in greater depth:

- the Gardiner/Lakeshore corridor and, particularly, the area along the Central Bayfront boundary of Harbourfront and the Railway Lands, where there is active redevelopment occuring right now, and where a common working understanding about the future of the area is needed, in order to guide the diverse actions of a wide variety of interested groups;
- a new plan for the East Bayfront and the Port of Toronto, an area extending from Yonge Street to Ashbridge's Bay and from Eastern Avenue to the Outer Harbour, which constitutes, by far, the biggest area of under-utilized land on the Toronto waterfront; the potential for redevelopment raises many critical issues, not least the virtual absence of an adequate urban infrastructure of streets,

parks, public transit, services, etc. The situation should be studied carefully before specific commitments foreclose future options;

- the inescapable fact that the current use of large parts of the Greenwood Racetrack site as surface parking will be reconsidered. The potential for integrating the site into its local community and into the waterfront planning process should be examined now;
- impending changes on the periphery of Fort York, which may threaten its character and should be monitored carefully. The visibility of and public access to this most historic Toronto precinct must be significantly enhanced as redevelopment proceeds on neighbouring land parcels;
- the many opportunities to open parts of the Scarborough, Toronto, and Etobicoke waterfronts that are now inaccessible but, because of private and public initiatives, are potentially accessible. An overall strategy will be needed to take full advantage of these opportunities.

We have made many recommendations, some of them global, and some of them purely local. Our study indicates the range of issues that coalesce around the waterfront, the agencies responsible, and the depth of commitment necessary, if we are to achieve a waterfront that will serve our citizens, now and in the future.

Bibliography

Albery, Pullerits, Dickson and Associates. *Ferry Service across Western Gap*. Toronto: Albery, Pullerits, Dickson and Associates, 1982.

B-A Consulting Group Limited. *Downtown District, Toronto: Transportation Impact Overview: Broadcast Centre Development Project*. Toronto: B-A Consulting Group Limited, June 1988.

_____. *SkyDome: Transportation and Operations Plan: Summary Report*. Toronto: B-A Consulting Group Limited, 17 October 1988.

_____. *The Spadina Downtown Subway: A Proposal for the Rationalization of Subway Operation in Metropolitan Toronto*. Toronto: B-A Consulting Group Limited, December 1987.

_____. *Traffic Overview: Gardiner-Lakeshore Transportation Corridor: Five-Year Capital Plan*. Toronto: B-A Consulting Group Limited, March 1987.

_____. *Transportation Considerations: Four Alternative Sites for Toronto Seaquarium*. Toronto: B-A Consulting Group Limited, June 1988.

Baird/Sampson Architects et al. *Harbourfront 2000: A Report to the Futures Committee of Harbourfront*. Toronto: Harbourfront Corporation, October 1987.

Barber, John. "Bury It." *Toronto* (November 1988): 52-55, 92-102.

Breen, Ann, and Dick Rigby. *Caution: Working Waterfront: The Impact of Change on Marine Enterprises*. Washington, D.C.: The Waterfront Press, 1985.

Bureau of Municipal Research. *Should the Island Be an Airport*. Toronto: Bureau of Municipal Research, November 1977.

Burka, Astra. "Beautify the City: Bury the Gardiner." *The Toronto Star*, (20 October 1988): A29.

Canada. Transport Canada and Ontario. Ministry of Transportation and Communications. *Toronto Island Airport Study Program: Studies of Alternative Aviation Uses for Toronto Island Airport Site*. Toronto: Transport Canada and Ontario, Ministry of Transportation and Communications, 1977.

Coopers and Lybrand Consulting Group. *Report on the Feasibility of a World Exposition for Ontario: Phase I*. Toronto: Ontario, Ministry of Tourism and Recreation, October 1987.

Currie Coopers and Lybrand Management Consultants and Arcop-Thom Architects. *Exhibition Place Development Plan*. Toronto: Exhibition Place Policy Steering Committee, Exhibition Place Technical Committee, July 1983.

Daigle, Jean-Marc et al. *The Port District Revitalization Plan*. Toronto: York University Faculty of Environmental Studies, 18 December 1987.

Desfor, Gene, Michael Goldrick and Roy Merrens. "Redevelopment on the North American Water-Frontier: The Case of Toronto." In *Revitalizing the Waterfront: International Dimensions of Dockland Development*, eds. B. S. Hoyle, D. A. Pinder and M. S. Husain. 92-113. London: Belhaven Press, 1988.

Deverell, John. "Boston's Solution to the Traffic Mess: Bury It! Is Expressway Project a Lesson for Metro?" *The Toronto Star*, (7 October 1988): A26.

du Toit Allsopp Hillier and DS Lea Associates Limited. *Gardiner/Lakeshore Corridor: A Civic Design Study*. Toronto: The Task Force on the Gardiner/Lakeshore Corridor, September 1988.

Economic Planning Group, The. *Great Lakes Cruises: Feasibility Study*. Toronto: privately published, 1988.

Eggleton, Arthur C. *"Toronto's Waterfront: Ensuring the Vision"*. Speech to City Council. Toronto: City of Toronto, City Council, 29 June 1987.

Etobicoke, Borough of. Planning Department. *The Lakeshore Psychiatric Hospital Land Use Study*. Etobicoke: Borough of Etobicoke, Planning Department, 27 May 1983.

_____. *The Mimico Study*. Etobicoke: Borough of Etobicoke. Planning Department, 30 March 1983.

Etobicoke, City of. Planning Department. *Amendments to the Official Plan and Zoning Code to Permit the Redevelopment of the Westpoint Motor Inn for Residential Condominium, Commercial Office and Marina Uses: Application of Rylar Development Limited*. Etobicoke: City of Etobicoke, Planning Department, 15 December 1987.

_____. *Lakeshore Update Index*. Etobicoke: City of Etobicoke, 1988.

_____. *The Motel Strip Study*. Etobicoke: City of Etobicoke, Planning Department, 15 January 1986.

_____. *Official Plan of the Etobicoke Planning Area: The Motel Strip: Amendment No. C-65-86*. Etobicoke: City of Etobicoke, February 1988.

_____. *Proposed Amendments to By-Law No. 1984-147 to Permit an Additional 39 Units; Limited Waterfront Retail Uses; A Commercial Office Use; and, A Realignment of the Proposed Boardwalk and Pedestrian Walkway: Application of Cam-Lake Developments Limited*. Etobicoke: City of Etobicoke, Planning Department, 27 January 1988.

_____. *Proposed Amendments to the Official Plan and Zoning Code to Permit a 168-Unit Condominium Apartment Building: Application of Andmark Associates Inc. and Newport Corporation*. Etobicoke: City of Etobicoke, Planning Department, 11 May 1988.

_____. *Report to the City of Etobicoke Development Committee about Z-1978: Andmark Associates and Newport Corporation #2097-#2101 and #2111 Lake Shore Boulevard West (Revised Plans)*. Etobicoke: City of Etobicoke, Planning Department, 13 June 1988.

_____. *Status Report: Lakeshore Psychiatric Hospital Lands*. Etobicoke: City of Etobicoke, 27 April 1988.

Ferguson Associates. *Access Study for City Express*. Toronto: City Express, 1987.

Ferguson, Ferguson Architects. *Guiding the Gardiner: A Plan for the Expressway's Place in the City: Phase I*. Ottawa: The Task Force on the Gardiner/Lakeshore Corridor, October 1986.

Friends of the Spit. *Newsletter*. Toronto: Friends of the Spit, July 1988.

_____. *Newsletter*. Toronto: Friends of the Spit, October 1988.

Hatch Associates and Transmode Consultants Inc. Toronto *Island Airport Access Overview: Working Paper*. Toronto: Ontario, Ministry of Transportation Toronto Area Coordinating Office, March 1988.

IBI Group. *Gardiner-Lakeshore Corridor Traffic Management System Feasibility Study*. Toronto: Municipality of Metropolitan Toronto, October 1987.

_____. *Transportation Analysis for Precincts 7, 8 and 9 of City Place*. Toronto: CN Real Estate, June 1988.

John Mowlem and Company PLC. *London City Airport*. London, England: John Mowlem and Company PLC, 1987.

Johnson Sustronk Weinstein and Associates. *The Metropolitan Toronto Waterfront: Boating Demand Study Update*. Toronto: The Metropolitan Toronto and Region Conservation Authority,
16 May 1985.

Jones, Jack H., and Shoreline Engineering Limited. *Bold Concept II: A Conceptual Plan for the Development of the Central Toronto Waterfront*. Toronto: Ontario, Special Advisor to the Premier on Waterfront Development, 1988.

Kirkland, Michael. *"Digesting the Indigestibles: The Urban Expressway"*. Slide show and talk, June 1988.

M.M. Dillon Limited. *Front Street-Gardiner Expressway Interchange: Environmental and Feasibility Study: Environmental Study Report: Appendices*. Toronto: Municipality of Metropolitan Toronto, Department of Roads and Traffic, September 1988.

_____. *Front Street-Gardiner Expressway Interchange: Environmental and Feasibility Study: Environmental Study Report: Summary*. Toronto: Municipality of Metropolitan Toronto, Department of Roads and Traffic, September 1988.

M.M. Dillon Limited, Roger du Toit Architects and Morrison Hershfield Limited. *Union Station Study: Phase I*. Toronto: Railway Lands Steering Group, September 1985.

_____. *Union Station Study: Phase II*. Toronto: Railway Lands Steering Group, September 1986.

Marathon Realty. *Toronto Union Station Pedestrian Project Linking Front Street to the Waterfront: Discussion Paper*. Toronto: Marathon Realty, n.d.

Marshall Macklin Monaghan Limited. *Central Bayfront Ramp Study: Phase II*. Toronto: City of Toronto, May 1987.

Metropolitan Toronto and Region Conservation Authority, The. *Lake Ontario Waterfront: A Strategy*. Toronto: The Metropolitan Toronto and Region Conservation Authority, 6 April 1988.

_____. Package of material describing parks: Marie Curtis Waterfront Area, Colonel Sam Smith Waterfront Area, Humber Bay, Tommy Thompson Park, Bluffers Park, Petticoat Park. Toronto: The Metropolitan Toronto and Region Conservation Authority, n.d.

_____. *Tommy Thompson Park: Master Plan*. Toronto: The Metropolitan Toronto and Region Conservation Authority, December 1987.

_____. *The Watershed Plan of the Metropolitan Toronto and Region Conservation Authority*. Toronto: The Metropolitan Toronto and Region Conservation Authority, 1986.

Metropolitan Toronto, Municipality of. Department of Roads and Traffic. *Front Street-Gardiner Expressway Interchange: Environmental and Feasibility Study: Environmental Study Report*. Toronto: Municipality of Metropolitan Toronto, Department of Roads and Traffic, September 1988.

Metropolitan Toronto, Municipality of. Planning Department. Transportation Division. *Access Alternatives. Toronto Island Airport Study Program, Report No. 6*. Toronto: Municipality of Metropolitan Toronto, Planning Department, 1977.

Metropolitan Toronto, Municipality of. Planning Department, Roads and Traffic Department, and Toronto Transit Commission. *Future Transportation Needs in the Greater Toronto Area*. Toronto: Metropolitan Toronto, Planning Department, Roads and Traffic Department, and Toronto Transit Commission, March 1987.

Metropolitan Toronto, Municipality of, and Toronto Transit Commission. *Harbourfront LRT Extension: Study of Potential Alignments*. Toronto: Municipality of Metropolitan Toronto and Toronto Transit Commission, June 1988.

Metropolitan Toronto, Municipality of. Planning Department, and Toronto Transit Commission. *Network 2011: A Rapid Transit Plan for Metropolitan Toronto*. Toronto: Municipality of Metropolitan Toronto, Planning Department, and Toronto Transit Commission, May 1985.

_____. *Network 2011: Final Report*. Toronto: Municipality of Metropolitan Toronto, Planning Department, and Toronto Transit Commission, June 1986.

Metropolitan Toronto, Municipality of. Planning Department, Roads and Traffic Department and Parks and Property Department. *Scarborough Transportation Corridor: Right-of-Way Requirements and Property Management*. Toronto: Municipality of Metropolitan Toronto, Planning Department, Roads and Traffic Department, and Parks and Property Department, July 1988.

Ontario. Ministry of Transportation and Communications. *Access to SkyDome on Opening Date: A Status Report*. Toronto: Ontario, Ministry of Transportation and Communications, August 1987.

Ontario. Ministry of Government Services, and City of Toronto. *St. Lawrence Square*. Toronto: Ontario, Ministry of Government Services and City of Toronto, July 1988.

Ontario. Ministry of Transportation. *Transportation Directions for the Greater Toronto Area*. Toronto: Ontario, Ministry of Transportation, May 1988.

Paul Reuber Architect. *Urbanizing the Gardiner: An Action Plan for Incorporating Housing Below, Beside, and Above Toronto's Elevated Expressway: Phase I*. Toronto: The Task Force on Gardiner/Lakeshore Corridor, October 1986.

Peter Barnard Associates and A.J. Diamond Planners Limited. *Lakeshore Planning Study: Final Report: Future Use Options for the Lakeshore Psychiatric Hospital Property*. Etobicoke: Ontario, Ministry of Government Services and City of Etobicoke, September 1986.

Ridout, Fleisher, Arcop and Hemson. *Port Industrial Concept Plan*. Toronto: The TorontoHarbour Commissioners, 1988.

Robinson, Gerald. *Input on the Need for a Downtown Airport*. Toronto: Input Consultants, 1974.

Robinson, Gerald, and George Sladek. *A Toronto Vision for the Island Airport*. Toronto: George Sladek Limited, 1987.

Scarborough, City of. Planning Department *Northeast Scarborough Land-Use Study: Background Report*. Scarborough: City of Scarborough, Planning Department, May 1985.

_____. *Northeast Scarborough Land-Use Study: Concepts Report*. Scarborough: City of Scarborough, Planning Department, 5 May 1985.

_____. *Northeast Scarborough Land-Use Study: Natural and Environmentally Sensitive Areas Report*. Scarborough: City of Scarborough, Planning Department, December 1984.

_____. *Northeast Scarborough Land-Use Study: Notification Report*. Scarborough: City of Scarborough, Planning Department, May 1988.

_____. *Northeast Scarborough Land-Use Study: Proposals Report for the Upper Rouge Community Secondary Plan*. Scarborough: City of Scarborough, Planning Department, May 1985.

_____. *Northeast Scarborough Land-Use Study: Revised Concepts Report*. Scarborough: City of Scarborough, Planning Department, September 1987.

Scarborough, City of. Commissioner of Planning. *Report by the Commissioner of Planning to Scarborough Council on the Port Union Area*. Scarborough: City of Scarborough, Commissioner of Planning, January 1988.

Scarborough, City of. Planning Department. *The Scarborough Transportation Corridor Study*. Scarborough: City of Scarborough, Planning Department, August 1984.

Scarborough, City of. Recreation and Parks Department. *Scarborough Parks Directory*. Scarborough: City of Scarborough, Recreation and Parks Department, January 1987.

Sillaste and Nakashima, Architects. *Housing Study for the Queen Elizabeth Docks*. Toronto: City of Toronto, Planning Board, November 1978.

Sladek, George. *Mobile Air Terminal Research*. Montreal: Transportation Development Centre, 1985.

Toronto, City of. Department of the City Clerk. *Central Waterfront Official Plan and Zoning By-laws Amendments*. Toronto: City of Toronto, Department of the City Clerk, May 1988.

_____. *List of Documents Referred to in Clause 1 of Land Use Committee Report No. 14, Entitled "Central Waterfront Official Plan and Zoning By-Law Amendments"*. Toronto: City of Toronto, Department of the City Clerk, 20 May 1988.

Toronto, City of. Legal Department. *Report to Toronto City Council about Draft By-laws, Central Waterfront Official Plan Amendment and Zoning By-Law, discussed at City Council meeting of March 21, 1988*. Toronto: City of Toronto, Legal Department, 9 May 1988.

_____. *Remedial Action Plan for the Toronto Waterfront*. Toronto: City of Toronto, Department of the City Clerk, April 1988.

Toronto, City of. Planning and Development Department. *Bathurst Quay Sub-Area Plan*. Toronto: City of Toronto, Planning and Development Department, 1983.

_____. *The Central Waterfront: Final Recommendations*. Toronto: City of Toronto, Planning and Development Department, March 1984.

_____. *The Central Waterfront: Proposals*. Toronto: City of Toronto, Planning and Development Department, 24 March 1984.

_____. *Further Report to the City ofToronto Land Use Committee on Council's March 21, 1988 Request for Draft By-laws Amending the Official Plan and Zoning By-law for the Central Waterfront*. Toronto: City of Toronto, Planning and Development Department, 9 May 1988.

_____. *Overview of the Waterfront: Draft*. Toronto: City of Toronto, Department of Planning and Development, May 1987.

Toronto, City of. Planning and Development Department. *Report to City of Toronto Land Use Committee about Request for Draft By-laws Amending the Official Plan and Zoning By-law for the Central Waterfront*. Toronto: City of Toronto, Planning and Development Department, 25 April 1988.

_____. *Report to Council, Development Review Application by Dover Corporation Canada to Build a Manufacturing Plant in the Port Industrial District*. Toronto: City of Toronto, Planning and Development Department, 1988.

_____. *Report to Toronto City Council about Central Waterfront Plan: Issues Raised at Land Use Committee, May 18, 1988*. Toronto: City of Toronto, 10 June 1988.

_____. *Report to Toronto City Council about Development Review Application 388121, Parts of 3 Leslie Street and 585 Commissioners Street, to construct a one-storey maanufacturing plant with accessory three-storey office area and 65.5 m elevator testing tower (Ward 8)*. Toronto: City of Toronto, Planning and Development Department, 12 August 1988.

_____. *Supplementary Report to the City of Toronto Land Use Committee on Council's Request for Draft By-laws Amending the Official Plan and Zoning By-law for the Central Waterfront*. Toronto: City of Toronto, Planning and Development Department, 17 May 1988.

Toronto Harbour Commissioners, *The. Alternate Channel Study. Toronto Island Airport Study Program, Report No. 5*. Toronto: The Toronto Harbour Commissioners, 1977.

_____. *Annual Report: The Toronto Harbour Commissioners: 1986-1987*. Toronto: The Toronto Harbour Commissioners, 1987.

_____. "Charting a Course for the Future: The Port Industrial Area Concept Plan." *Port of Toronto News*, vol. 35, no. 3 (1988): 5-7.

_____. *Toronto Islands Tunnel*. Toronto: The Toronto Harbour Commissioners, 1965.

Toronto Historical Board. *Fort York Capital Development Programme*. Toronto: Toronto Historical Board, 2 September 1988.

Toronto Island Study Group. *Toronto Island Access Study*. Toronto: Intergovernmental Study Forum, 1982.

Toronto Transit Commission. *Transit on the Waterfront: Progress Report Number 2*. Toronto: Toronto Transit Commission, Summer 1988.

Toronto Transit Commission. Engineering and Construction Branch. "Future Extensions." In *Central Waterfront Area Transit Plan: Proposed Harbourfront L.R.T.* Toronto: Toronto Transit Commission, Engineering and Construction Branch, February 1984.

Totten Sims Hubicki Associates Limited. *Functional Planning Report: Lawrence Avenue Extension*. Toronto: City of Toronto, 7 June 1971.

Transportation Research Board. Commission on *Sociotechnical Systems. National Research Council. Air Service, Airport Access and Future Technology*. Ottawa: National Research Council, 1981.

Transportation Systems Associates. *Inventory and Review of Transportation Plans and Proposals for the Toronto Waterfront*. Toronto: Ontario, Office of the Premier, March 1988.

Wheeler, Glenn. "Shoreline on the Make." *Now* (6-12 October 1988): 10-11, 17.

MAPS
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FILMED

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